Please amend the claims to read as indicated in the following list of claims:

1. (Currently amended)   A method of intruder detection, comprising

using ~~of usage of~~ more than ~~1~~ one sensor, represented by cameras that are arranged with fixed spatial orientation to form a stereo detector of 2D distributions of light intensity of a surveillance zone, that form stereo images registered by said stereo detector, and

transmitting the stereo images to processing blocks, for performing processing of a sequence of stereo images with different frequencies, ~~(~~high and low~~)~~, for determining the presence of an intruder, a position of said intruder and a speed of transference of said intruder;

the determining of an intruder including comparing geometrical figures with a set of geometrical figures that were memorized in advance that describe both resolved objects and a possible intruder, and the scaling of a figure in dependence of a measured distance between the stereo detector and the object that is represented by given figure and generating an alarm signal in case of coincidence with figure of possible intruder.

2. (Original) A method as defined in claim 1 wherein the processing includes the comparison of 2 or more consecutive images that are entering the processing block with high frequency, for detection of a fast moving intruder.

3. (Original) A method as defined in claim 1 wherein the processing includes measurement of 3D relief in the view field of the stereo detector, for detection of a slow moving or static intruder.

4. (Original) A method as defined in claim 1 wherein the processing includes measurement of 3D relief by the processor of detection of a static intruder in the case of detection of possible intruder by the processor of detection of a moving intruder.

5. (Original) A method as defined in claim 1 wherein the processing includes determining a local measure of difference of elements that are visible on a stereo image, and memorizing elements of the stereo image when the measured local value is more than a predetermined one in a storage device, while comparing 2 or more consequent images in the processor of detection of a moving intruder.

6. (Original) A method as defined in claim 5 wherein the processing includes performing integration of closely set elements of stereo image into geometrical figures that are stored to the storage device.

7. (Original) A method as defined in claim 6 wherein the processing includes determining a distance from stereo camera and a geometrical size for every geometrical figure, taking into account of a fixed positional relationship of sensors.

Claim 8. Canceled

9. (Currently amended)   A method ~~as defined in claim 3~~ of intruder detection, comprising

        using more than one sensor, represented by cameras that are arranged with fixed spatial orientation to form a stereo detector of 2D distributions of light

intensity of a surveillance zone, that form stereo images registered by said stereo detector, and

transmitting the stereo images to processing blocks, for performing processing of a sequence of stereo images with different frequencies, (high and low), for determining the presence of an intruder, a position of said intruder and a speed of transference of said intruder;

~~wherein the processing includes~~ searching of correspondent points in stereo image in the processor of detection of static intruder for measurement of 3D relief as in view field of stereo camera, after that determining the distance up to the elements of relief that are presented on stereo image using the known fixed positional relationship of the sensors.

10. (Original)A method as defined in claim 9 wherein the processing includes memorization of 3D relief of scene thereto memorize a series of a predetermined number of stereo images of the surveillance zone in absence of possible intruders, performing measurement of distances up to elements that are presented on the stereo image averaging the measured distances on the series of stereo images and memorizing the obtained relief in the storage device.

11. (Currently amended)   A method ~~as defined in claim 6~~ of intruder detection, comprising

using more than one sensor, represented by cameras that are arranged with fixed spatial orientation to form a stereo detector of 2D distributions of light intensity of a surveillance zone, that form stereo images registered by said stereo detector, and

transmitting the stereo images to processing blocks, for performing processing of a sequence of stereo images with different frequencies, (high and

low), for determining the presence of an intruder, a position of said intruder and a speed of transference of said intruder;

wherein the processing includes performing a comparison of 3D relief that was measured elementwise with a relief that was measured in advance in absence of an intruder and memorized in a storage device in the processor of for the detection of a static intruder, and memorizing elements of relief for whose the distinction differs from visible elements of relief that are saved to memory on a value that is more than predetermined one, as a result of comparison.

12. (Original)   A method as defined in claim 11 wherein the processing includes performing the integration of closely set elements of stereo image that are saved to memory of the device into the geometrical figures.

13. (Original)   A method as defined in claim 12 wherein the processing includes performing the comparison of parameters of geometrical figures that are distinguished with corresponding geometrical parameters of human body that are known in advance, and thereby making a decision about the appearance of intruder.

14. (Original)   A method as defined in claim 13 wherein the processing includes performing an initial calibration that consists of saving to memory of series of stereo images of an object with known geometrical characteristics, measuring of corresponding geometrical characteristics, comparing the measured characteristics with known ones and determining of corresponding corrections used to perform the calibration again in the case of change of positional relationship of sensors of stereo detector.

15. (Original)   A device for intruder detection that includes more than one
signal sensor, signal processor and executive block that differs in that they install
coupled video cameras as a signal sensor, the dynamic signal preprocessor that is
extra inserted into the processor whose input is connected to output of the first
sensor, and output is connected to input of extra inserted moving object detector
and input of extra inserted first static preprocessor, at the same time the second
input of the moving objects detector is connected to output of the second
dynamic signal preprocessor whose input is connected to output of the second
sensor whose second output is connected to input of second static preprocessor
whose second input is connected to second output of second dynamic
preprocessor and the third input of moving objects detector is connected to the
output of control panel whose second output is connected to the first input of
static decision performer whose second input is connected to output of dynamic
decision performer whose input is connected to output of moving objects detector
at that outputs of first and second static preprocessors are connected to the first
input of extra inserted reconstructor of 3D scene whose second input is
connected to extra inserted 3D objects calibrator and output is connected to extra
inserted 3D objects detector whose output is connected to the third input of static
decision performer whose output is connected to executive device of alarm signal
creation.